

## RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical  
Information Center (STIC) no errors detected.

Application Serial Number: 10/549,302  
Source: P4/10  
Date Processed by STIC: 10/28/05

# ***ENTERED***



PCT

## RAW SEQUENCE LISTING

DATE: 10/28/2005

PATENT APPLICATION: US/10/549,302

TIME: 12:15:35

Input Set : A:\AM100485 (2-5-04).ST25.txt

Output Set : N:\CRF4\10282005\J549302.raw

```

3 <110> APPLICANT: Wyeth Holdings Corporation
5 <120> TITLE OF INVENTION: MUTANT CHOLERA HOLOTOXIN AS AN ADJUVANT AND AN ANTIGEN
CARRIER
6     PROTEIN
8 <130> FILE REFERENCE: AM100485
C--> 10 <140> CURRENT APPLICATION NUMBER: US/10/549,302
C--> 10 <141> CURRENT FILING DATE: 2005-09-15
10 <160> NUMBER OF SEQ ID NOS: 8
12 <170> SOFTWARE: PatentIn version 3.2
14 <210> SEQ ID NO: 1
15 <211> LENGTH: 720
16 <212> TYPE: DNA
17 <213> ORGANISM: Vibrio cholerae
19 <400> SEQUENCE: 1
20 aatgatgata agttatatcg ggcagattct agacctcctg atgaaataaa gcagtcaggt      60
22 ggtcttatgc caagaggaca gagtcactac tttgaccgag gtactcaaat gaatatcaac      120
24 ctttatgatc atgcaagagg aactcagacg ggatttggtta ggcacgatga tggatatggt      180
26 tccacctcaa ttagtttgag aagtgcccac ttagtggttc aaactatatt gtctggtcac      240
28 tctacttatt atatatatgt tatagccact gcacccaaca tgtttaacgt taatgatgta      300
30 ttagggggcat acagtcctca tccagatgaa caagaagttt ctgctttagg tgggattcca      360
32 tactcccaaa tatatggatg gtatcgagtt ctttttgggg tgcttgatga acaattacat      420
34 cgtaaataggg gctacagaga tagatattac agtaacttag atattgctcc agcagcagat      480
36 ggttatggat tggcaggttt ccctccggag catagagctt ggaggggaaga gccgtggatt      540
38 catcatgcac cgccggggtt tgggaatgct ccaagatcat cgatgagtaa tacttgcgat      600
40 gaaaaaaccc aaagtctagg tgtaaaattc cttgacgaat accaatctaa agttaaaaga      660
42 caaatatttt caggctatca atctgatatt gatacacata atagaattaa ggatgaatta      720
45 <210> SEQ ID NO: 2
46 <211> LENGTH: 240
47 <212> TYPE: PRT
48 <213> ORGANISM: Vibrio cholerae
50 <400> SEQUENCE: 2
52 Asn Asp Asp Lys Leu Tyr Arg Ala Asp Ser Arg Pro Pro Asp Glu Ile
53 1           5           10           15
56 Lys Gln Ser Gly Gly Leu Met Pro Arg Gly Gln Ser Glu Tyr Phe Asp
57           20           25           30
60 Arg Gly Thr Gln Met Asn Ile Asn Leu Tyr Asp His Ala Arg Gly Thr
61           35           40           45
64 Gln Thr Gly Phe Val Arg His Asp Asp Gly Tyr Val Ser Thr Ser Ile
65           50           55           60
68 Ser Leu Arg Ser Ala His Leu Val Gly Gln Thr Ile Leu Ser Gly His
69 65           70           75           80
72 Ser Thr Tyr Tyr Ile Tyr Val Ile Ala Thr Ala Pro Asn Met Phe Asn
73           85           90           95
76 Val Asn Asp Val Leu Gly Ala Tyr Ser Pro His Pro Asp Glu Gln Glu

```

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```

77          100          105          110
80 Val Ser Ala Leu Gly Gly Ile Pro Tyr Ser Gln Ile Tyr Gly Trp Tyr
81          115          120          125
84 Arg Val His Phe Gly Val Leu Asp Glu Gln Leu His Arg Asn Arg Gly
85          130          135          140
88 Tyr Arg Asp Arg Tyr Tyr Ser Asn Leu Asp Ile Ala Pro Ala Ala Asp
89 145          150          155          160
92 Gly Tyr Gly Leu Ala Gly Phe Pro Pro Glu His Arg Ala Trp Arg Glu
93          165          170          175
96 Glu Pro Trp Ile His His Ala Pro Pro Gly Cys Gly Asn Ala Pro Arg
97          180          185          190
100 Ser Ser Met Ser Asn Thr Cys Asp Glu Lys Thr Gln Ser Leu Gly Val
101          195          200          205
104 Lys Phe Leu Asp Glu Tyr Gln Ser Lys Val Lys Arg Gln Ile Phe Ser
105          210          215          220
108 Gly Tyr Gln Ser Asp Ile Asp Thr His Asn Arg Ile Lys Asp Glu Leu
109 225          230          235          240

```

112 &lt;210&gt; SEQ ID NO: 3

113 &lt;211&gt; LENGTH: 20

114 &lt;212&gt; TYPE: DNA

115 &lt;213&gt; ORGANISM: Artificial

117 &lt;220&gt; FEATURE:

118 &lt;223&gt; OTHER INFORMATION: Synthetic oligo

120 &lt;400&gt; SEQUENCE: 3

121 aagttatata aggcagattc

20

124 &lt;210&gt; SEQ ID NO: 4

125 &lt;211&gt; LENGTH: 18

126 &lt;212&gt; TYPE: DNA

127 &lt;213&gt; ORGANISM: Artificial

129 &lt;220&gt; FEATURE:

130 &lt;223&gt; OTHER INFORMATION: Synthetic nucleotide sequence

132 &lt;400&gt; SEQUENCE: 4

133 cagattctaa acctcctg

18

136 &lt;210&gt; SEQ ID NO: 5

137 &lt;211&gt; LENGTH: 22

138 &lt;212&gt; TYPE: DNA

139 &lt;213&gt; ORGANISM: Artificial

141 &lt;220&gt; FEATURE:

142 &lt;223&gt; OTHER INFORMATION: synthetic oligo

145 &lt;220&gt; FEATURE:

146 &lt;221&gt; NAME/KEY: misc\_feature

147 &lt;222&gt; LOCATION: (9)..(9)

148 &lt;223&gt; OTHER INFORMATION: nucleotide variation

150 &lt;400&gt; SEQUENCE: 5

W--&gt; 151 gacagagtna gtactttgac cg

22

154 &lt;210&gt; SEQ ID NO: 6

155 &lt;211&gt; LENGTH: 22

156 &lt;212&gt; TYPE: DNA

157 &lt;213&gt; ORGANISM: Artificial

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```

159 <220> FEATURE:
160 <223> OTHER INFORMATION: synthetic oligo
163 <220> FEATURE:
164 <221> NAME/KEY: misc_feature
165 <222> LOCATION: (8)..(8)
166 <223> OTHER INFORMATION: nucleotide variation
168 <220> FEATURE:
169 <221> NAME/KEY: misc_feature
170 <222> LOCATION: (14)..(14)
171 <223> OTHER INFORMATION: nucleotide variation
173 <400> SEQUENCE: 6
W--> 174 cagatganca agangtttct gc 22
177 <210> SEQ ID NO: 7
178 <211> LENGTH: 22
179 <212> TYPE: DNA
180 <213> ORGANISM: Artificial
182 <220> FEATURE:
183 <223> OTHER INFORMATION: synthetic oligo
186 <220> FEATURE:
187 <221> NAME/KEY: misc_feature
188 <222> LOCATION: (8)..(8)
189 <223> OTHER INFORMATION: nucleotide variation
191 <220> FEATURE:
192 <221> NAME/KEY: misc_feature
193 <222> LOCATION: (14)..(14)
194 <223> OTHER INFORMATION: nucleotide variation
196 <400> SEQUENCE: 7
W--> 197 cagatganca agangtttct gc 22
200 <210> SEQ ID NO: 8
201 <211> LENGTH: 7
202 <212> TYPE: PRT
203 <213> ORGANISM: Homo sapiens
205 <400> SEQUENCE: 8
207 Asp Ala Glu Phe Arg His Asp
208 1 5

```

RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/10/549,302

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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:5; N Pos. 9  
Seq#:6; N Pos. 8,14  
Seq#:7; N Pos. 8,14

Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete,  
per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:3,4,5,6,7

VERIFICATION SUMMARY

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L:10 M:270 C: Current Application Number differs, Replaced Current Application No

L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:151 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0

L:174 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:0

L:197 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:0